USDA Foreign Agricultural Service

Iraq: Crop Progress Report

MY 2008/09

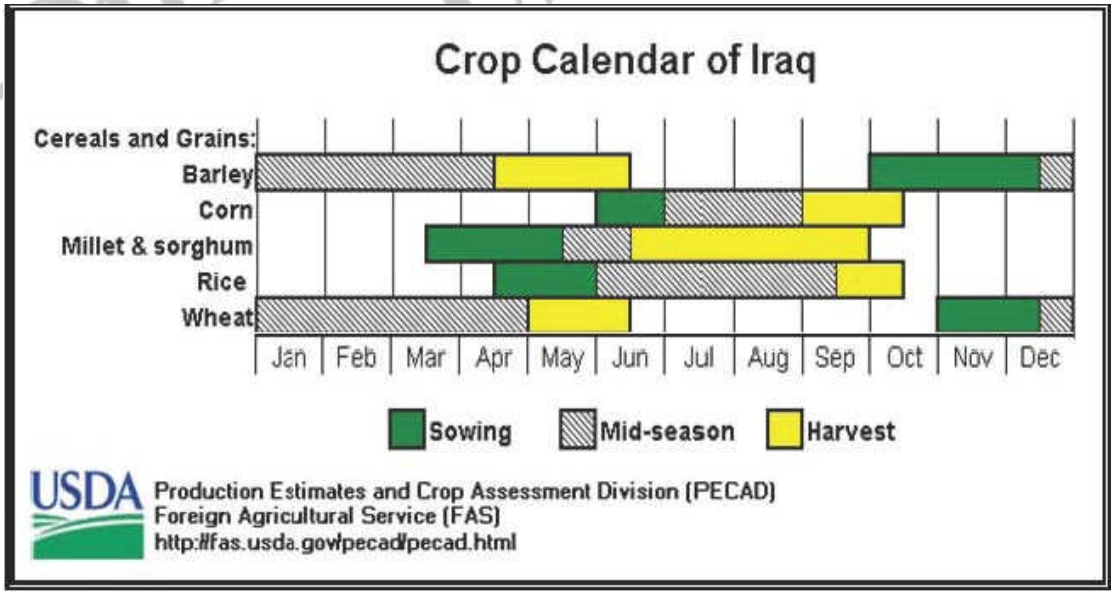
June Report - Week 3 **June 20th, 2008**

1. Production for MY 2008/09 winter grains is forecasted to be lower than the previous year. Production decreases are related to late rainfall during the start of season combined with below normal seasonal precipitation. The predominantly rainfed northern governorates were impacted the most with lower production also expected in central and southern governorates.

2. Regional crop harvest maps were created using MODIS NDVI data between peak crop stage (April 5th) and harvest (June 6th). The analysis showed that most governorates have begun harvesting with an estimated area of change at approximately 1.3 million hectares (Figure 1).

3. Figure 2 is a subset of the MODIS derived crop harvest map. Harvested areas with distinct patterns of increasing vegetation cover are clearly defined. The increase may correspond with summer cropping; mainly due to the irrigation needs of vegetable crops and close proximity to a water source (i.e. Tigris River).

4. High resolution Quickbird imagery collected over the same area of interest was retrieved from the NGA WARP database. NDVI and vegetation change detection maps derived from imagery acquired between April 9th, 2008 and May 7th, 2008 displayed a similar pattern of harvested fields and increased vegetation cover in close proximity to the Tigris River (Figures 3 and 4). Further investigation is needed to relate the increase to summer vegetable cropping.



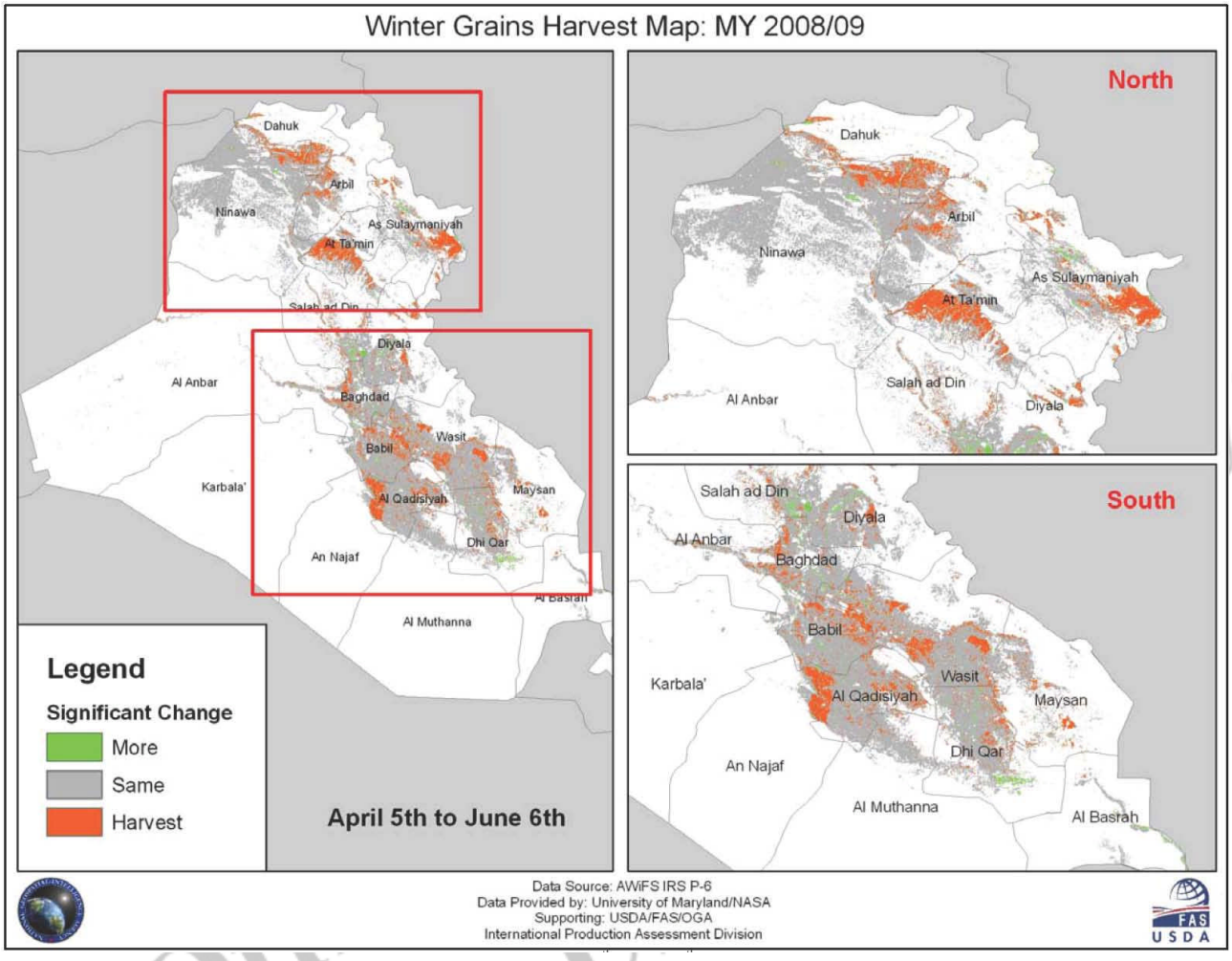


Figure 1: Winter grains harvest map derived from changes in NDVI: April 5th to June 6th.

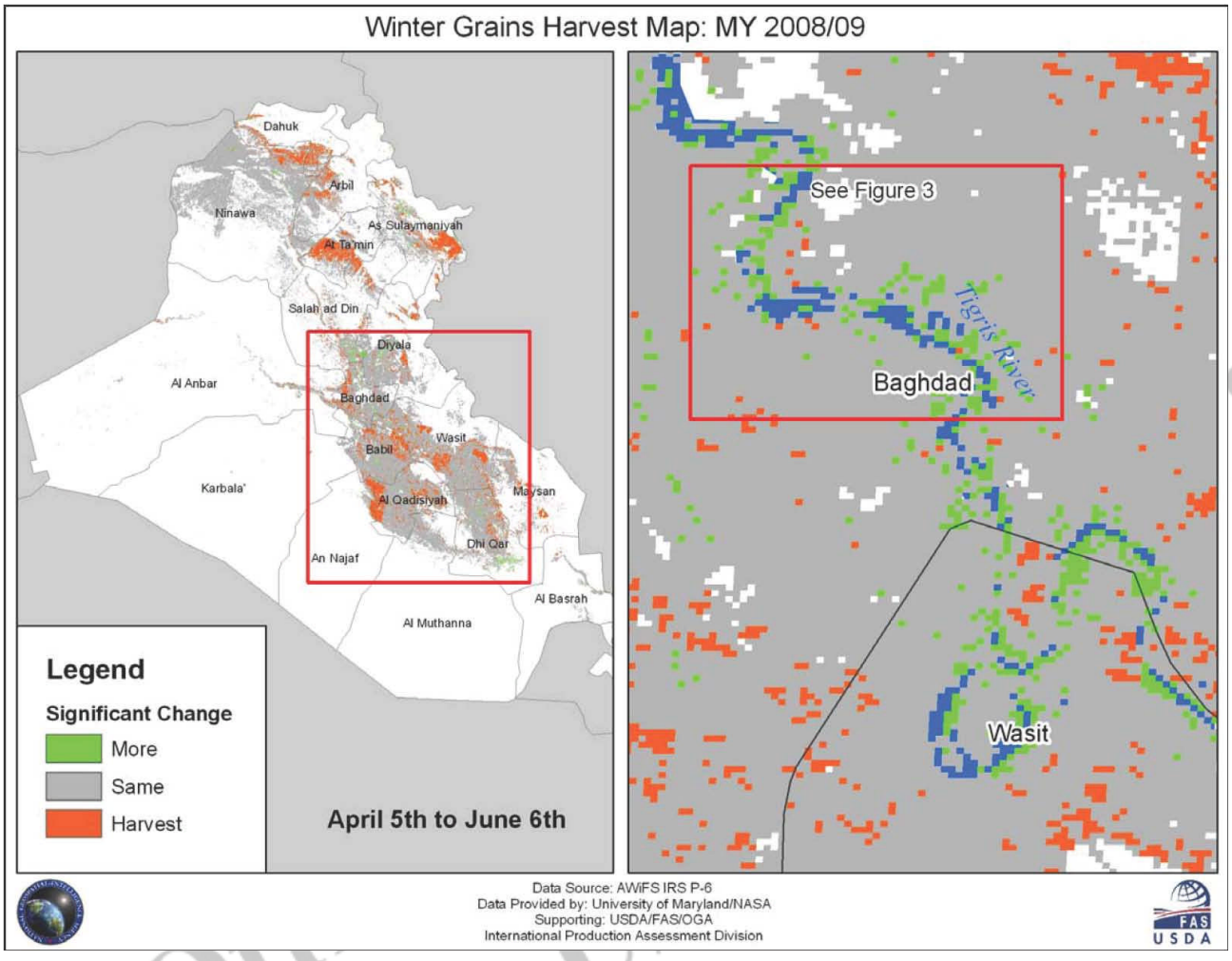


Figure 2: Winter grains harvest map revealing increased vegetation in close proximity to river.

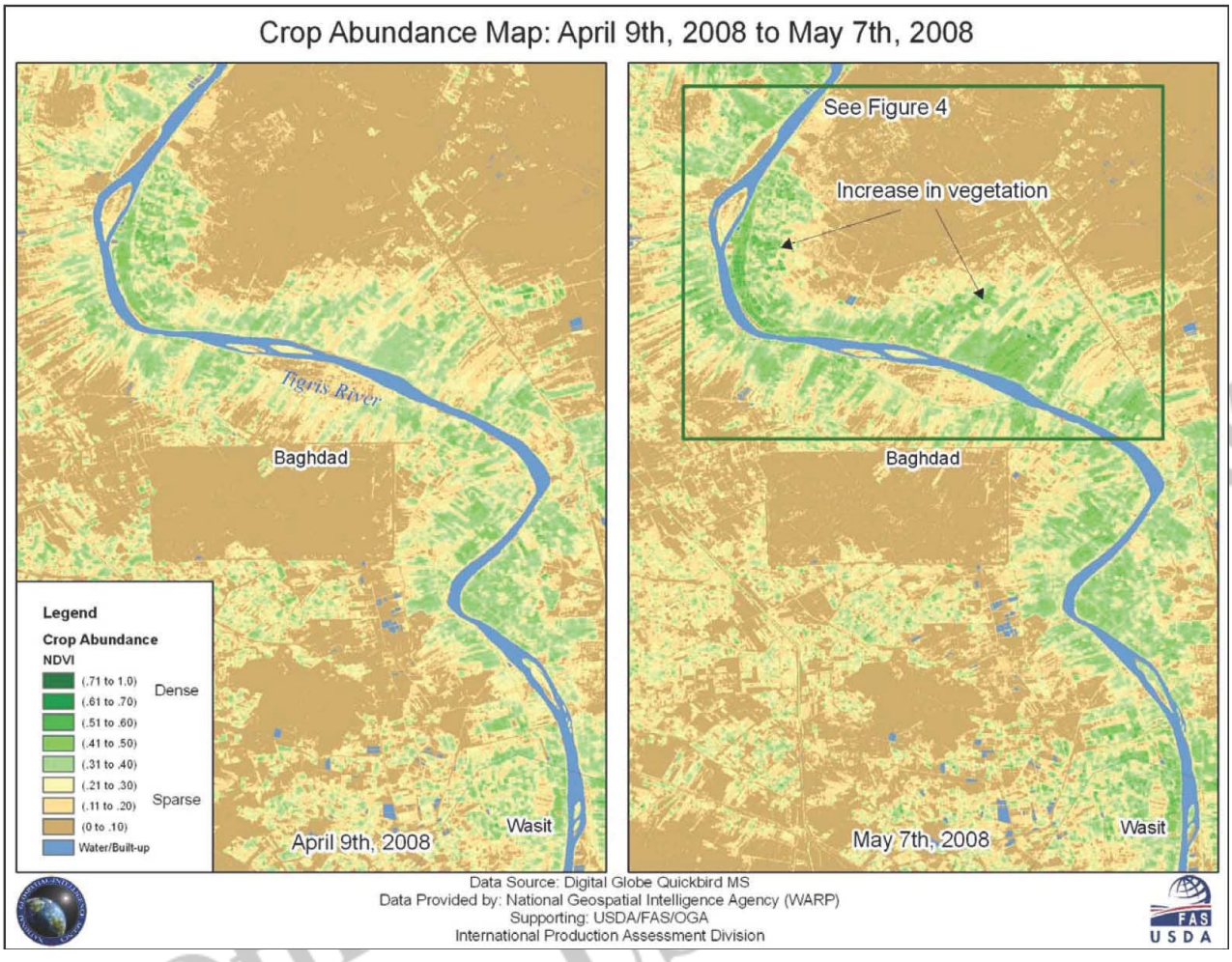


Figure 3: Crop abundance map derived from Quickbird MS NDVI: Increased vegetation in close proximity to river between April 9th and May 7th, 2008.

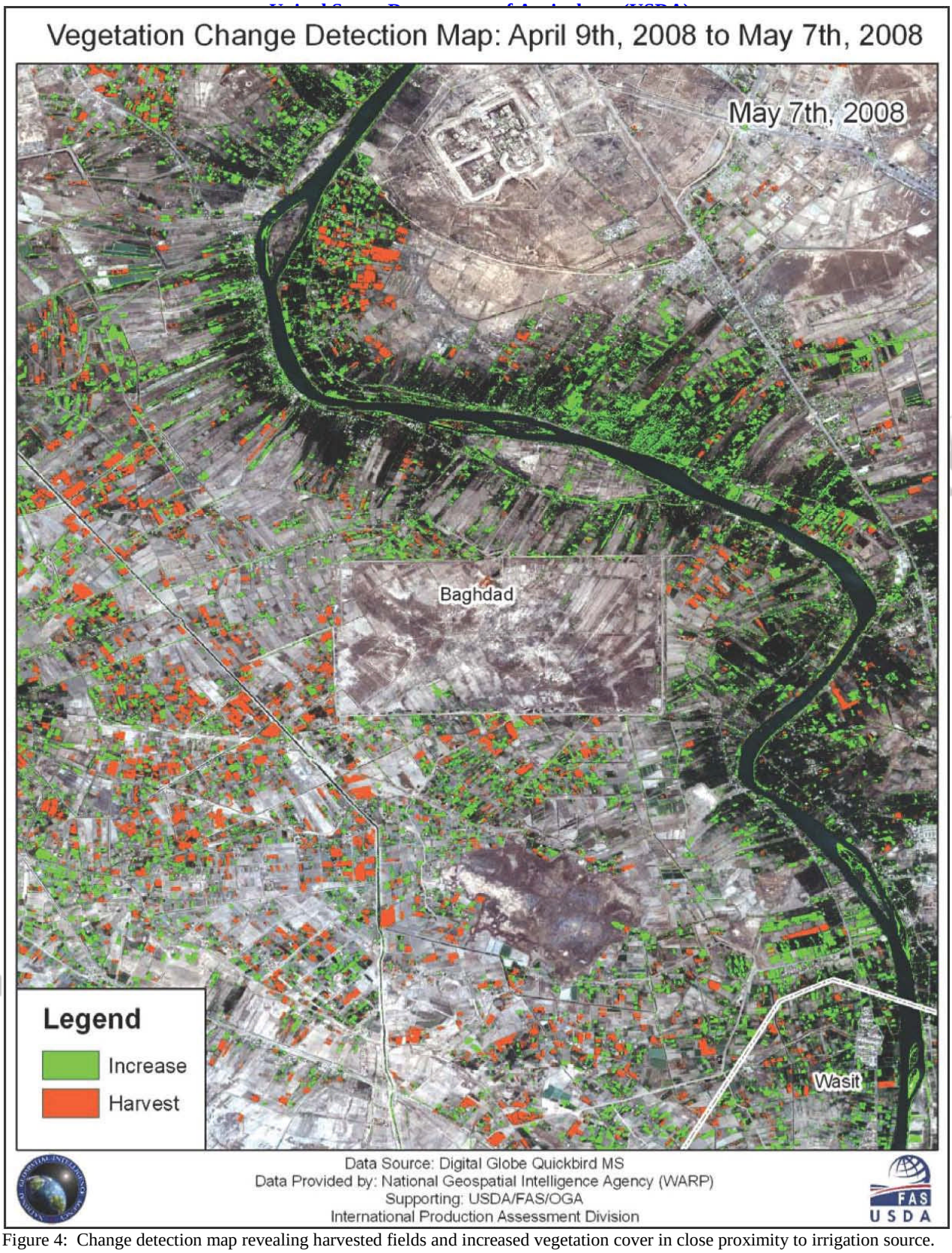


Figure 4: Change detection map revealing harvested fields and increased vegetation cover in close proximity to irrigation source.